

## CLAIMS

What is claimed is:

- 1 1. An integrated tracing and logging system employed within a network comprising:  
2 a tracing module associated with specified program code regions of an application,  
3 the tracing module to receive and process tracing method calls generated by the application  
4 when the specified program code regions are executed;  
5 a logging module associated with specified categories related to the network, the  
6 logging module to receive and process logging method calls from network components  
7 associated with the categories; and  
8 a log viewer module to provide an interface to the integrated tracing and logging  
9 system.
- 1 2. The system of claim 1, wherein the log viewer module comprises:  
2 a log viewer client to provide a user interface; and  
3 a log viewer server to access a message in at least one of the tracing module and the  
4 logging module.
- 1 3. The system of claim 2, wherein the log viewer client is to provide a graphical user  
2 interface to access one or more log messages generated by at least one of the tracing module  
3 and the logging module.
- 1 4. The system of claim 3, wherein the log viewer client is to provide a first pane having  
2 one or more log messages from a first application server and a second pane having one or log  
3 messages from a second application server.

1 5. The system of claim 3, wherein the log viewer client is to provide a graphical user  
2 interface to configure an output destination for the integrated tracing and logging system.

1 6. The system of claim 5, wherein the graphical user interface to configure an output  
2 destination comprises a dialog window to set an attribute of the output destination.

1 7. The system of claim 6, wherein the attribute of the output destination includes at least  
2 one of  
3 a severity level; and  
4 a filter.

1 8. The system of claim 3, wherein the one or more log messages are implemented as  
2 management beans.

1 9. The system of claim 2, wherein the log viewer client is to provide a command line  
2 interface to access one or more log messages generated by at least one of the tracing module  
3 and the logging module.

1 10. A computer-implemented method employed within a network comprising:  
2 creating an instance of a tracing controller associated with specified program code  
3 regions of an application, the tracing controller instance to receive and process tracing  
4 method calls generated by the application when the specified program code regions are  
5 executed;  
6 creating an instance of a logging controller associated with specified categories  
7 related to the network, the logging controller to receive and process logging method calls  
8 from network components associated with the categories;

9 specifying an output destination to receive a log message from at least one of the  
10 tracing controller instance and the logging controller instance; and  
11 accessing the log message with a log viewer, the log viewer having a log viewer  
12 server and a log viewer client.

1 11. The method of claim 10, wherein accessing the log message comprises:  
2 accessing a first log message on a first application server;  
3 accessing a second log message on a second application server; and  
4 displaying the first log message and the second log message in a window of a  
5 graphical user interface of the log viewer client.

1 12. The method of claim 11, wherein displaying the first log message and the second log  
2 message in the window of the graphical user interface of the log viewer client comprises:  
3 displaying the first log message in a first pane of the window; and  
4 displaying the second log message in a second pane of the window.

1 13. The method of claim 11, further comprising:  
2 selecting the first log message in the first pane of the window;  
3 selecting the second log message in the second pane of the window;  
4 merging the first log message and the second log message; and  
5 displaying the first log message and the second log message in a third pane of the  
6 window.

1 14. The method of claim 11, wherein displaying the first log message and the second log  
2 message in a window of a graphical user interface of the log viewer client further comprises:  
3 displaying one or more log messages of the output destination in the window of the  
4 graphical user interface of the log viewer client.

- 1 15. The method of claim 14, further comprising:  
2 searching the one or more displayed log messages to determine which, if any, of the  
3 displayed log messages contain a search string.
- 1 16. The method of claim 15, further comprising:  
2 identifying at least one of the one more displayed log messages having the search  
3 string;  
4 creating a search results pane in the window of the graphical user interface; and  
5 displaying the identified log message in the search results pane.
- 1 17. The method of claim 10, further comprising:  
2 displaying a representation of the output destination in the log viewer;  
3 selecting the displayed representation of the output destination;  
4 opening a dialog window to access an attribute of the displayed representation of the  
5 output destination; and  
6 setting an attribute of the selected output destination with the opened dialog window.
- 1 18. The method of claim 17, wherein setting the attribute of the selected output  
2 destination comprises:  
3 setting a severity level of the output destination.
- 1 19. The method of claim 17, wherein setting the attribute of the selected output  
2 destination comprises:  
3 specifying a filter for the output destination.
- 1 20. A system comprising:

2        a means for creating an instance of a tracing controller associated with specified  
3        program code regions of an application, the tracing controller instance to receive and process  
4        tracing method calls generated by the application when the specified program code regions  
5        are executed;

6        a means for creating an instance of a logging controller associated with specified  
7        categories related to the network, the logging controller to receive and process logging  
8        method calls from network components associated with the categories;

9        a means for specifying an output destination to receive a log message from at least  
10       one of the tracing controller instance and the logging controller instance; and

11       a means for accessing the log message with a log viewer, the log viewer having a log  
12       viewer server and a log viewer client.

1       21.    The system of claim 20, wherein the means for accessing the log message with the  
2       log viewer comprises:

3       a means for accessing a first log message on a first application server;

4       a means for accessing a second log message on a second application server; and

5       a means for displaying the first log message and the second log message in a window  
6       of a graphical user interface of the log viewer client.

1       22.    The system of claim 21, further comprising:

2       a means for selecting the first log message in the first pane of the window;

3       a means for selecting the second log message in the second pane of the window;

4       a means for merging the first log message and the second log message; and

5       a means for displaying the first log message and the second log message in a third  
6       pane of the window.

1       23.    The system of claim 20, further comprising:

2 a means for displaying a representation of the output destination in the log viewer;  
3 a means for selecting the displayed representation of the output destination;  
4 a means for opening a dialog window to access an attribute of the displayed  
5 representation of the output destination; and  
6 a means for setting an attribute of the selected output destination with the opened  
7 dialog window.

1 24. The system of claim 20, wherein the means for setting the attribute of the selected  
2 output destination comprises:

3 a means for setting a severity level of the output destination.

1 25. An article of manufacture comprising:

2 an electronically accessible medium providing instructions that, when executed by an  
3 apparatus, cause the apparatus to

4 create an instance of a tracing controller associated with specified program code  
5 regions of an application, the tracing controller instance to receive and process tracing  
6 method calls generated by the application when the specified program code regions are  
7 executed;

8 create an instance of a logging controller associated with specified categories related  
9 to the network, the logging controller to receive and process logging method calls from  
10 network components associated with the categories;

11 specify an output destination to receive a log message from at least one of the tracing  
12 controller instance and the logging controller instance; and

13 access the log message with a log viewer, the log viewer having a log viewer server  
14 and a log viewer client.

1 26. The article of manufacture of claim 25, wherein the instructions that, when executed  
2 by the apparatus, cause the apparatus to access the log message cause the apparatus to  
3 access a first log message on a first application server;  
4 access a second log message on a second application server; and  
5 display the first log message and the second log message in a window of a graphical  
6 user interface of the log viewer client

1 27. The article of manufacture of claim 26, wherein the instructions that, when executed  
2 by the apparatus, cause the apparatus to display the first log message and the second log  
3 message in a window of a graphical user interface of the log viewer client cause the  
4 apparatus to  
5 display one or more log messages of the output destination in the window of the  
6 graphical user interface of the log viewer client.

1 28. The article of manufacture of claim 27, wherein the electronically accessible medium  
2 provides further instructions that, when executed by the apparatus, cause the apparatus to  
3 search the one or more displayed log messages to determine which, if any, of the  
4 displayed log messages contain a search string.

1 29. The article of manufacture of claim 28, wherein the electronically accessible medium  
2 provides further instructions that, when executed by the apparatus, cause the apparatus to  
3 identify at least one of the one more displayed messages having the search string; and  
4 create a search results pane in the window of the graphical user interface; and  
5 display the identified message in the search results pane.

1 30. The article of manufacture of claim 25, wherein the electronically accessible medium  
2 provides further instructions that, when executed by the apparatus, cause the apparatus to

- 3 display a representation of the output destination in the log viewer;
- 4 select the displayed representation of the output destination;
- 5 open a dialog window to access an attribute of the displayed representation of the
- 6 output destination; and
- 7 set an attribute of the selected output destination with the opened dialog window.